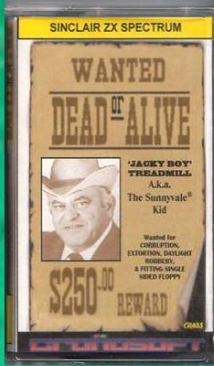


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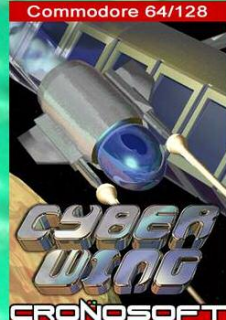
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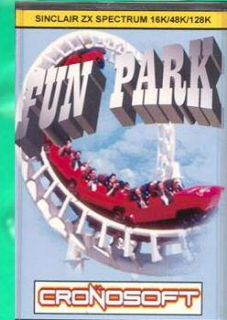
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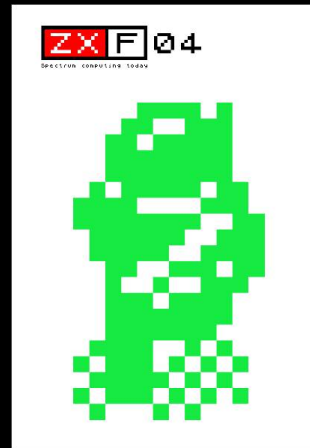
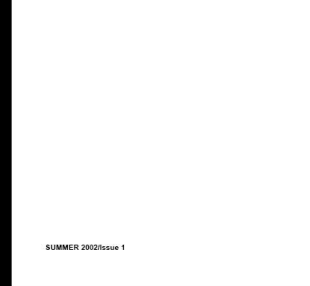
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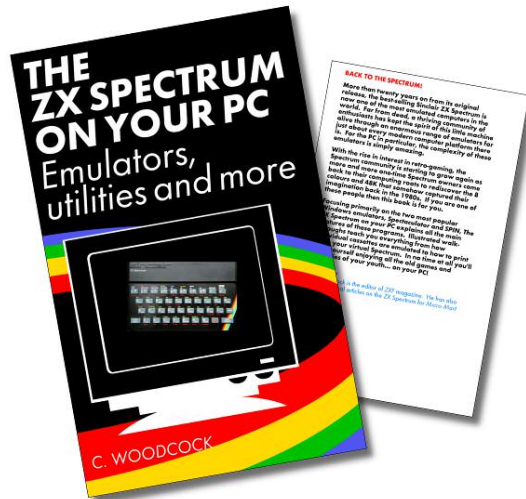
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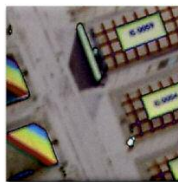


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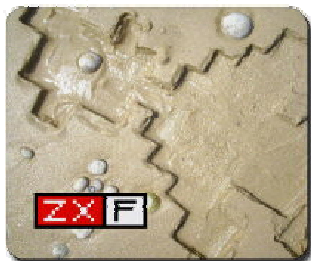
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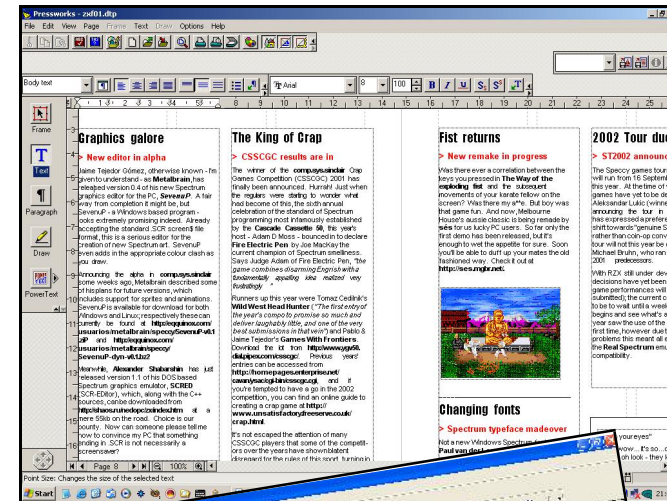
The popular issue 8 Manic Miner cover is now a durable, clothtop mousepad.

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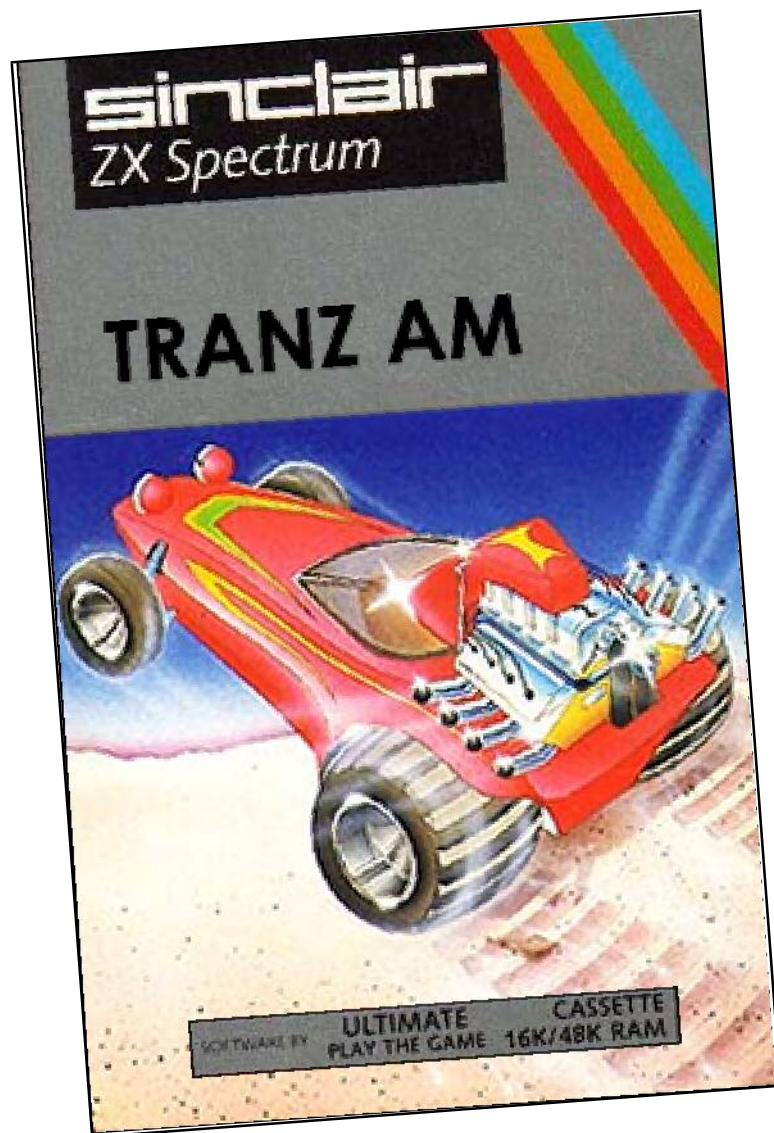


**ABOVE:** The first issue of ZXF was produced using **Pressworks 2** and converted to PDF format using the freeware program **PDF 995**. Graphically fairly unambitious, the DTP file for the issue weighed in at a slice under 9MB. Also, PDF 995 had a few difficulties with fonts in those days, so the typeface was kept at Arial throughout to avoid complications - even so there were a few difficulties (with apostrophes) occasionally. **JAWS PDF**, however, experienced no such problems, and at the same time that this was introduced (issue 4) the DTP software was also upgraded to **Greenstreet Publisher 3**. The way was clear for some much more complex and creative work! The DTP file for this issue, for example, weighs in at over 150MB. In ten issues also the pagecount has gone up from 28 to 56 pages.

worked a lot better had it been full cover) - a homage of sorts to the artwork of John Harris (who designed the cover to the original Spectrum manual, introduction booklet and Interface 1 & Micro-drive manual). Issue 6's cover took me ages and was inspired by Oliver Frey's CRASH issue 36 cover. Issue 7's cover was a detail from a photo of my own Spectrum software collection (passed through a whole cocktail of PSP filters). Issue 8 - a popular cover, apparently - is testament to what you can do with a digital camera and a sand pit on a bright Sunday morning (sorry to those of you who imagined me digging away on a beach somewhere, but the ZXF expense account wouldn't stump up the bus fare). Issue nine was straightforward - a Christmassy 3D stereogram featuring Horace (I'd always thought that Spectrum sprites might lend themselves particularly well to stereograms and wanted to experiment). This issue's cover is a play on the phrase 'The ZX Spectrum on your PC' and involved a PC keyboard blue-tacked to the wall of the ZXF office and an LCD projector.

'The ZX Spectrum on your PC,' of course, is another project to have come out of ZXF. As is ZXF, the interactive fiction software label (which will see more releases in future, I promise). And the ZXF website. And a number of articles for Micro Mart magazine. And a sizeable contribution to last year's *Your Sinclair* revival issue. Gratifying things, for sure, although the most gratifying thing of all, by a very considerable margin, is the sheer number of countries in which ZXF is read and enjoyed.

Well, that's it for now. Just one last check to make sure the fridge door's open. And I'm out of here. Out of the door... down the street... feeling the sunshine... smelling the air... Did I shut all the windows? Oh crap...



### HAVE YOU SEEN THIS GAME?

Rare doesn't even begin to describe this title... if in fact it exists. The coding system used by Sinclair suggests that it does, but other Sinclair silver inlay re-releases of the Ultimate titles - although hardly common - do crop up on ebay from time to time. Not so Tranz Am. The image above is a mock-up; if you have seen the real thing then ZXF would love to hear from you. [www.cwoodcock.co.uk/zxf](http://www.cwoodcock.co.uk/zxf)

Read more on page 42



Above: ZXGP32 Options menu

The music on Fairlight is tolerable but not perfect. "Overscan" produces a reasonable effect in the border, but it's not in synch with the effect on the main part of the screen.

### SpeccyAI K 0.7

Curiously, SpeccyAI K loads with border emulation switched off. This tends to leave artefacts from the startup or Options screen remaining in the border area, so I suggest switching it back on straightaway (use both shoulder buttons to reach the Options screen). There wasn't any obvious impact on performance.

The file selector (right shoulder button) allows directory browsing, which is a definite plus point. There is autoloading of TAP files, plus SNA support, and, supposedly, Z80 support, although my 128K snapshot of Fairlight 2 didn't seem to load. Also, attempting to load a file seems occasionally to cause the GP32 to reboot.

The keyboard popup is another full-screen image. Note though that, unlike elsewhere in this emulator, it's the B key to select a key.

Joystick selection is between Cursor, Sinclair 1 or 2, and user defined keys - there is no Kempston

support.

There was no border effect in Aquaplane, whether or not the "Fast rendering" option was on. The Overscan demo doesn't look too hot either.

The sound on Fairlight is pretty unpleasant to the ear.

SpeccyAI K plays a mean game of Cobra, however, with non-flickering sprites, provided that "Fast rendering" is off (the default mode).

### fZX32 (Xmas edition)

This is probably the sleekest and most capable emulator currently available on the GP32. It starts up with a splash screen (based on a Head Over Heels room with a variety of game characters in it). It then impresses further by attempting to automatically identify the games you have saved onto the card (in \GPM\ZX). For example, Manic Miner displays as "Manic Miner (1983) (Bug-Byte Software)". Although this approach can clearly only work for games known by the emulator, it is a nice touch. (Note however that if you add any games to this directory, you will have to rescan it.)

fZX32 seems to be the most capable of the emulators here for loading different formats. It loads from inside ZIP files, it loads Z80 and SNA files (it is the only emulator here which I could get to load as 128K Fairlight 2 snapshot), it has TAP and partial TZX support, and fast-loading and auto-loading of tape files.

SELECT brings up the usual pop-up keyboard. This version is quite usable and can also be moved around the screen.

There seem to be some timing problems on fZX32. In Manic Miner

for example, Willy crosses the screen almost twice as quickly as he does in Spectactulator, although the 'Debug' option shows a speed of around 103%.

fZX32 also plays Cobra without flickering sprites. It also manages a near-perfect rendering of the Over-scan demo. Its rendition of the Fairlight music is hideous - but in fairness, the release notes do say that the beeper will be improved in the next release.

### Conclusion

Although the current generation of GP32 Speccy emulators can't compete with what's available on Windows, and they might not all be able to cope with the special effects in demos, they will generally give you a decent play of your favourite Speccy games.

It would be nice if emulator authors could either agree on a directory in which to look for snapshot and tape files, or if they could all provide a multi-directory browser.

At the moment, fZX32 seems to have the best general usability, with perhaps some problems getting the timing right. SpeccyAI K is probably the next most capable in terms of its functionality.

(c) 2005 Matthew Wilson







TZXF IS HERE

>Cassette version of ZXF up for download

It's a project I personally was seriously begining to doubt I'd ever get even close to completing. But **TZXF**, the cassette version of ZXF Magazine, is now a joint UK-Romanian venture and, thanks to the help of **Cristian Grecu** - who got in touch with ZXF just after issue nine had gone out - the first two issues are now ready to pull off the Internet and load into a real Spectrum.

The cassette versions are for a 48K Spectrum and feature the news section of each issue along with the editorial and game reviews. Each issue is a BASIC program with a small machine code routine giving 42 column text (Sinclair's own **Print Utilities**, in fact). Cristi typed up each magazine on his **HC-2000** (a Romanian Spectrum clone) and I edited his output using a combination of **BASin** for making alterations to the program and **Spectaculator** to check it all looked ok. Loading screens were put together using **ZX-Paintbrush**, **BMP2SCR** and **YASPIC**. Just to round things of, copious use was also made of **Taper**.

An international effort, then, in many ways. Which has made the project very satisfying. After all his hard work, ZXF wanted to learn a little more about Cristi and so I asked him a few questions:

ZXF: Tell us a bit about yourself.

CG: Let's have a look at the "ZX certified" people: 8% of them passed the exam. These are the masters of the ZX Spectrum. But let's think a little at the others 92%. Average users, most are still using the ZX Spectrum, others have a small website about it, all of them used and were impressed by this wonderful machine. Well, I'm just like them; just a guy who felt in love with the ZX Spectrum; a guy who prefers staying in front of a blinking cursor, working on a program that will never be used by anyone, rather than going to the disco or to a soccer game.

ZXF: How did you first come into contact with the Spectrum? Was it a UK model or a Romanian clone?

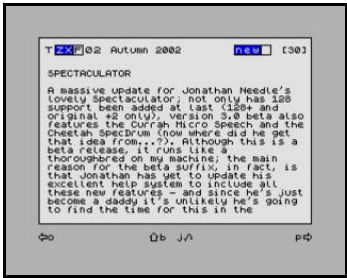
CG: I first met the ZX Spectrum in 1994: I was five years old, and the Spectrum era has just faded. My father gave me a HC-85 (Romanian clone of the 48), and taught me how to load games. Later, I learned BASIC, assembler and various utilities. Last year, an old dream was accomplished when I bought a HC-2000 (clone of the 48, with internal FDD unit), that I'm still using today.

ZXF: Do you mostly use real hardware or do you prefer emulators?

CG: Even the best emulator can't be compared with a Spectrum that works perfectly, on a color TV. I have never written a program on an emulator.

ZXF: When did you first learn about ZXF? What caused you to want to get involved with the TZXF project?

December 2004, Christmas Eve. Out of ideas, I was navigating on the World of Spectrum website when I saw a link to the ZXF website. Following the link, I found a very interesting magazine for both advanced and beginner users, presenting the development of the ZX Spectrum in the 21st century. I found the TZXF project an opportunity to help someone, especially because I can contribute a little to the development of the ZX Spectrum.



Hopefully you'll have arrived at something not dissimilar to the following:

- 13 G#2 5C4B
- 15 G#2 5A4B
- 16 G#2 5C4B
- 19 C-2 5C3C
- 21 C-2 5A3C
- 22 C-2 5C3C

Copy this to the second half of the pattern again (rows 24 onward), and we're pretty close to our final version. There's one last mystery to explain, though, and it's back in the sample editor. Edit sample number 6, and use the M key to set both rows of 0s into 1s. You know all about the bottom row - a digit 1 in that line masks out the white noise - but we now turn our attention to the row above. This masks out the volume setting, effectively silencing the sample. But why on earth would you want to do that? Surely if you wanted a silent sample for whatever reason, you'd just set the volume level right down to the bottom?

The answer is that it turns off the square wave, while still allowing envelopes to do their stuff. (For the more audio-minded among you, it fixes the signal in the full-amplitude 'on' state, so there's no wave produced, and consequently no sound, unless you move the signal up and down by changing the volume.) In other words, this gives you a pure triangular or sawtooth wave, which is smoother and quieter than the triangular and square wave mish-mash that we were working with just now. The fact that it's quieter is particularly fortunate, because there's no way of playing envelope-based notes at (say) half volume.

Return to the pattern editor, and from row 24 onward, change all the notes that use envelopes A or C to use sample 6, with envelope A. Hear the difference? There are two things to bear in mind when working with 'muted' samples - firstly, changing the note from F-2 to anything else has no effect whatsoever, and secondly, because you're not mixing waves there's no audible 'cue' to know when you've hit the right pitch - you have to play it by ear. In our case we've already got our values worked out, though, so no worries there.

Epilogue: The Soundtracker compiler

Even though it's a completely different subject, it would be awfully impolite of me not to tell you how to use your music outside of the tracker. What you need to do is save your track from Soundtracker, and then fire up the Soundtracker compiler (available from World Of Spectrum, unsurprisingly enough). Load the saved Soundtracker data, then hit 'Compile Song' and wait for it to do its stuff. Then go to 'Merge Play Routine' and choose where the music is going to reside in memory - 49152 is the usual address to go for if you don't have any better ideas. You're then ready to save the compiled data file, and as you do so, you'll be told a bunch of important addresses. The first one is for the initialise routine, which will reside at the address you chose - you need to call it before playing the track, and again when you want the AY chip to shut up. The player routine proper starts 6 bytes further on, and you need to call this every 50th of a second while the song is playing. In Basic, it looks like this:

```
10 CLEAR 49151
20 LOAD "my_track"CODE
30 RANDOMIZE USR 49152: REM initialise
40 PAUSE 1
50 RANDOMIZE USR 49158: REM play
60 IF INKEY$<>" " THEN GO TO 40
70 RANDOMIZE USR 49152: REM silence
```

If you want to have more than one tune kicking around, then save the subsequent ones out from the compiler without going through the 'Merge Play Routine' step. Before calling the initialise routine, poke (initialise address + 1) and (initialise address + 2) with the start address of the track you want to play. Machine code programmers will find ample opportunity for hacking the player to suit their own evil plans.

And, if I'm not mistaken, that just about wraps up our tour of Soundtracker's capabilities. From here on, all that remains is to take this knowledge and apply it towards your own creative ways. Good luck and happy composing!

## OCEAN VIDEO

&gt;Dedicated video page

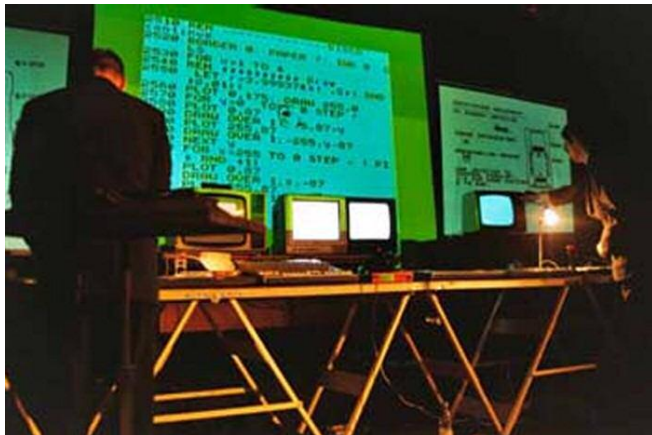
theoceanexperience.co.uk is a new website and discussion forum started up earlier in the year by ex-Ocean employee Mark R Jones and aims to collect together all sorts of artefacts regarding the experience of working at Ocean in the 80s and 90s. One of the most interesting pages is his video collection page; as well as the fantastic Commercial Breaks documentary (see last issue) there's a 72 second 'Chegwin Checks It Out' feature where broadcasting legend Mr Keith Chegwin visits the Ocean coding parlour to ask all the questions on the lips of 80s Britain. Even more interesting (as if anything could top that) is the behind-the-scenes home movie of Cheggers and his film crew setting the whole thing up; be amazed as you witness such trade secrets as smiling and nodding at the camera to look interested...



## CHIPTUNES GALORE

&gt;Online radio examination

Sincere respect is due to **CSS** and **WoS Forums** regular **Sharopolis** for an absolutely cracking radio documentary on ZX Spectrum music presented on **Flat four** ([www.mclid.co.uk/flatfour](http://www.mclid.co.uk/flatfour)) during the first couple of weeks of April. Produced with his mate Dan, Sharopolis presents the programme, taking the listener on a journey that starts with some modern AY tracks and an interview with **AY Riders** artist **Matthew Westcott** (aka **Gasman**); from there we are treated to a rare interview with the legendary **Tim Follin**, creator of so many classic ZX tunes in the eighties and one of Matthew's



www.capsule.org.uk

don't drown out the melody.

Going back to the main tracker screen, we can enter our chords into channel C of our pattern. The following notes will give us a simple but effective rhythm:

```

00 F-4 5F01
01 --- 0000
02 F-4 5F01
03 --- 0000
04 --- 0000
05 F-4 5F01
06 F-4 5F01
07 --- 0000
08 F-4 5F01
09 --- 0000
10 --- 0000
11 F-4 5F01
12 G#4 5F01
13 --- 0000
14 G#4 5F01
15 --- 0000
16 --- 0000
17 G#4 5F01
18 C-4 5F01
19 --- 0000
20 C-4 5F01
21 --- 0000
22 --- 0000
23 C-4 5F01

```

The right hand column is where the ornaments come in to play; the 5 refers to sample 5 as usual, the F is a special instruction to tell the tracker to use an ornament, and the 1 tells it to select ornament number 1. (The zero is... well, just a zero.)

Copy rows 00-23 to rows 24-47, using the 'Move Text' facility we covered last time, so that we have the chords covering the whole pattern.

I should point out that if you have a zero in the 'F' column, it will continue to use the last ornament played, so in that respect it behaves a lot like a zero in the 'sample number' column, and in fact we could get by with just entering the 5F01 into

row zero and leaving the rest at 0000 - but don't do that, because we're about to add some more notes there in a minute. If you want to go back to playing plain vanilla samples with no ornaments, put F00 as the last three digits (effectively selecting ornament number 0, a special 'do nothing' ornament).

## Envelopes

The boffins who designed the AY chip didn't know anything about trackers. They assumed that people would tend to pick a volume level for their notes and stick to it. In an effort to liven things up a bit, they introduced the concept of envelopes - these allow you to vary the volume level continuously over time, so you can have a note that starts at full volume and fades to nothing, or one that swells from nothing to full volume, or one that repeatedly fades in and then out... The full set

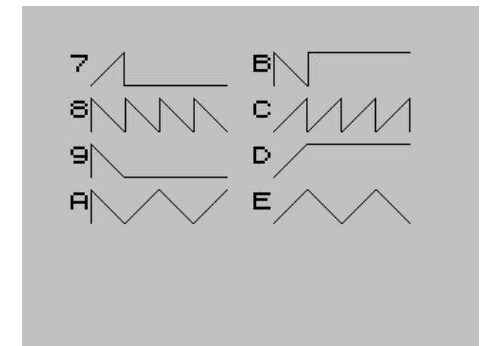


Figure 3.3

of permutations is shown in figure 3.3.

Of course, with Soundtracker samples we can do all that and a lot more besides, so you might wonder why we bother with envelopes at all. Well, they have one important trick up their proverbial sleeve - you can take any of the repeating envelopes (8, A, C and E) and speed them up to insane degrees, much faster than the 50Hz limit that comes as standard with Soundtracker. When you do that, it stops being a way of adjusting the volume of the waveform, and starts being a waveform all of its own. A nice juicy triangular or sawtooth wave to be specific - one that's particularly good for bass lines, although on special occasions AY musicians will be particularly daring and use it as the lead instrument.

Because they're controlled in hardware on the AY





## NEW COOKIE

### >Remake of early Ultimate classic

You know **Cookie**. Of course you do. Help Charlie Chef make his cake by deflecting the ingredients from the pantry into the mixing bowl and at the same time, of course (I mean, it's not like you ever get to do only one thing at a time in a Spectrum game - especially those knocked out by Ultimate - where would be the challenge in that?) avoid any nasties that might escape from the pantry or dustbins that will make your job harder. Fans of Cookie will no doubt be delighted to learn that they can now re-live these cake-making frolics in glorious technicolour thanks to **Space-Time Productions Ltd**, who reside in that corner of the web to found at [www.spacetimegames.co.uk](http://www.spacetimegames.co.uk). The remake - for that is what it is - is a collaboration between coder Steve Watson and graphics person OddBob. And it runs on Windows. Yes.

## NEW LABELS

### >Download for 3 inch disks

A simple, yet elegant idea from **swordheart**. Well where does one go to get 3 inch disk labels from these days? Not to Dixons, that's for certain. Not even to the guy on the market who does bulk-buy DVDs, replacement ink cartridges and an interesting line in novelty crystal. No. These convenient downloadable pages, however, are designed to be printed off onto A4 sticky labels and cut out. Simple. Now A4 sticky labels the



guy on the market does do...

## SMITH ANALYSIS

### >Willy creator to be immortalised

Emulator author **Adrian Robson** has contacted ZXF about a new project he is working on:

"I'm writing a book about Matthew Smith, Manic Miner, Jet Set Willy etc. This will be an A5 book that people can buy and some of the money will go to charity. The book will cover Smith's early years, Manic Miner, Jet Set Willy, All other versions of Manic Miner & Jet Set Willy, Screen shots etc, chart listings, hacking, what the future holds for Miner Willy and a bunch of other stuff. I'm about half way through at the minute and I'm very pleased with what I have so far. I want this to be the definitive book about Matthew Smith and Miner Willy, and I'm hoping that people who already know a bit about it all will find something interesting in there to read."

## SE NEWS

### >Andrew Owen update

**Andrew Owen** has also been in touch with ZXF to update us on the progress being made on his two projects, **SE Basic** and the **ZX Spectrum SE**. Regarding the former, the official website at [www.worldofspectrum.org/sinclairbasic/](http://www.worldofspectrum.org/sinclairbasic/) has been updated with new links and the latest version of his extended version of Sinclair BASIC (0.94B, released 16/12/04). Andrew has also added information on the differences between previous releases on the manuals page. He now has all the code to finish this project, but it's currently on hold again while he works on something else.

Regarding the ZX Spectrum SE, Andrew's hardware enhancement of the original ZX Spectrum produced in collaboration with Yarek Adamski, Andrew has

recently introduced ZXCf technology into this device, resulting in the **ZX Spectrum SE/CF**. ZXCf is the amazing Compact Flash interface by Sami Vehmaa for any Spectrum, giving it potentially enormous high-speed storage potential without the need for any hard disks and all their associated clutter. If you want to see what a ZXSE/CF would look like, it is already available in emulation using **FUSE**: just select the Spectrum SE model from the emulation list, activate the ZXCf interface and you have a working ZX Spectrum SE/CF environment.

Recently the ZXSE website at <http://zxse.raww.net/> has also been updated, including updated links and a new ZX Spectrum SE and Timex 2068 software archive. 99% of the Timex software in the archive will run on the ZX Spectrum SE using the Timex 2068 emulator. The archive also includes emulators which will run on the ZX Spectrum SE for the ZX80, the ZX81, the Timex 2068 (with help from Paul Farrow and Alvin Albrecht) and Shadow of the Unicorn SE. Shadow of the Unicorn, if you didn't know already, was a 64K Spectrum game by Mikro-Gen that required a peripheral device to be plugged into your Spectrum which replaced its 16K ROM with 16K's worth of game to supplement the remaining 48K that you then loaded in from tape. All very complicated and the SOTU SE emulator cuts out a lot of the mucking about.

Development of software for the ZX Spectrum SE is on hold for the time being, however future releases promised include a ZX Spectrum emulator (16K/48K) and a debugged version of 128 Basic (hopefully with an extra 16K in the RAM disk). When he gets time Andrew will also be releasing Elite DX, featuring minor graphic enhancements based on the NES version (Ian Bell's favourite 8-bit version, so I'm told).

## THE DEFINITIVE LIST OF SINCLAIR RESEARCH SOFTWARE FOR THE ZX SPECTRUM - a working document!!

First column gives actual spine codes, second gives order form codes. Order form codes highlighted in red are confirmed - i.e. they have been seen on a Sinclair order form. Order form codes in black, therefore, are 'assumed'. Thus the slightly 'out of sync' numbering from Backgammon to Scrabble is not a typing error. All Spine codes are confirmed except G29/S, 4037, 4331 and 4332.

## GAMES

G1/S	4000	Games 1
G2/S	4001	Games 2
G3/S	4002	Games 3
G4/S	4003	Games 4
G5/S	4004	Games 5
G6/S	4005	Pastimes 1
G7/S	4006	Pastimes 2
G8/S	4007	Biorhythms
G9/S	4008	Space Raiders
G10/S	4009	Chess
G11/S	4010	Flight Simulation
G12/S	4011	Planetoids
G13/S	4012	Hungry Horace
G14/S	4013	Adventure A: Planet of Death
G15/S	4014	Adventure B: Inca Curse
G16/S	4015	Adventure C: The Ship of Doom
G17/S	4016	Adventure D: Espionage Island
G18/S	4017	Reversi
G19/S	4018	The Hobbit
G20/S	4019	Embassy Assault
G21/S	4020	Horace goes Skiing
G22/S	4021	Backgammon
G23/S	4023	Cyrus-IS-Chess
G24/S	4022	Horace & the Spiders
G25/S	4024	Scrabble
G26/S	4025	Flippit
G27/R	4026	Jetpac
G28/S	4027	Pssst
G29/S	4028	Tranz Am ????
G30/S	4029	Cookie
G31/S	4030	Chequered Flag
G32/S	4031	Bubble Buster
G33/S	4032	Driller Tanks
G34/S	4033	Eric and the Floaters
G35/S	4034	Stop the Express
G36/S	4035	Zipper Flipper
4036	4036	Match Point
4037	4037	??????
4038	4038	Panama Joe
4039	4039	Return of the Jedi: Death Star Battle

## EDUCATIONAL

E1/S	4300	History 1
E2/S	4301	Geography 1
E3/S	4302	Inventions 1
E4/S	4303	Music 1
E5/S	4304	English Literature 1
E6/S	4305	Make a Chip
E7/S	4306	Music Master
E8/S	4307	Beyond BASIC
E9/S	4308	Chess Tutor 1
E10/S	4309	Learn to Read 1
E11/S	4310	Learn to Read 2
E12/S	4311	Learn to Read 3
E13/S	4312	Learn to Read 4
E14/S	4313	Learn to Read 5
E15/S	4314	Cargo
E16/S	4315	Glider
E17/S	4316	Survival

E18/S	4317	Magnets
E19/S	4318	Early Punctuation
E20/S	4319	Speech Marks
E21/S	4320	The Apostrophe
E22/S	4321	Capital Letters
E23/S	4322	Castle Spellerous
E24/S	4323	Alphabet Games
4324	4324	Oil Strike
4325	4325	Weathermaster
4326	4326	Planet Patrol
4327	4327	Disease Dodgers
4328	4328	Alphabetter
4329	4329	Wordsetter
4330	4330	Spellbox
4331	4331	Soundabout ??
4332	4332	Bodyswap ??
4333	4333	MacMan and the Gaber Eater
4334	4334	MacMan in the Treasure Caves
4335	4335	MacMan's Magic Mirror
4336	4336	MacMan and the Great Escape
4337	4337	Number Painter
4338	4338	Estimator Racer

## LANGUAGES

L1/S	4400	FORTH
L2/S	4401	Micro Prolog
L3/S	4402	Zeus Assembler
L4/S	4403	Monitor and Disassembler
L5/S	4404	Print Utilities
L6/S	4405	Sinclair Logo

## PERSONAL

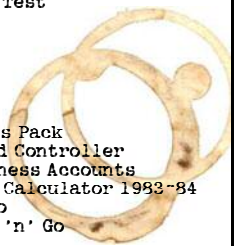
P1/S	4800	Cattell IQ Test
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## BUSINESS

B1/S	4600	VU-CALC
B2/S	4601	VU-FILE
B3/S	4602	VU-3D
B4/S	4603	Collector's Pack
B5/S	4604	Club Record Controller
B6/S	4605	Small Business Accounts
B7/S	4606	Which? Tax Calculator 1983-84
4607	4607	Tasword Two
4608	4608	Tiny Touch 'n' Go

## ROM CARTRIDGES

G9/R	5300	Space Raiders
G10/R	5301	Chess
G12/R	5302	Planetoids
G13/R	5303	Hungry Horace
G22/R	5304	Backgammon
G24/R	5305	Horace and the Spiders
G27/R	5306	Jet Pac
G28/R	5307	PSSST
G29/R	5308	Tranz Am
G30/R	5309	Cookie





## IN DENIAL

### >Permission matters

With the rise in popularity in retro gaming it was perhaps inevitable that a few copyright holders would examine their ownerships afresh to see if there was any new cash to be made in their handling. And so, over the past few months, distribution permission has again become a topic for hot debate, sparked by the very firm denial of distribution permission by **Paul McKenna** (no, not the hypnotist) of Thor and Odin titles at **www.worldofspectrum.org**. This particular piece of action was met by outrage by most WoS regulars - not so much by the decision itself as by the manner in which it was communicated ("It appears that you have on your site various games that are MY copyright and ownership. I intend to take proceeding against you and your company!"). Although Mr McKenna did become a great deal more polite in subsequent emails (a testament, no doubt, to WoS maintainer **Martijn van der Heide's** superb diplomacy skills), the community were unprepared to forgive him for assuming the worst of us and blundering in with such threatening language.

A key issue highlighted by Mr McKenna's emails and the debate they gave rise to was that of copyright belonging to the companies employing software writers in cases such as this, not to the software writers themselves. It appears that **Steve Wetherill**, a former employee of Mr McKenna and - by Mr McKenna's own admission - star programmer of many of the titles concerned had indicated that he was happy for his titles to be distributed from WoS; Mr McKenna was very quick to point out that this permission was not Mr Wetherill's to give.

Since the McKenna denial there have been further distribution developments, perhaps the most prolific revolving around an email allegedly sent by software house

**Activision** to retro gaming site **www.gamestage.net** asking them to remove Activision and **Electric Dreams** games from this site. In a long and rather confusing thread at WoS Forums, the owner of Gamestage asserted that he had received this email but that its contents were confidential. WoS at the time had received no such request from Activision, which was rather confusing since WoS has a first page Google ranking for both "Sinclair Spectrum" and "ZX Spectrum," whereas Gamestage's ranking on these search terms is nowhere near this high - if Activision were looking for websites to contact regarding the distribution of Spec-trum games, how did they come across Gamestage before WoS?

In the end (from what I can make out - the thread was a record 16 pages long last time I looked) Gamestage chose to share the Activision email address it had with Martijn, who then contacted the company only to be told that - yes - these titles were denied. It has to be said they did put this rather more politely than Paul McKenna.

Game Gamestage? Hmm... This incident in particular has highlighted for many the different ways in which copyright issues are treated between WoS and other emulation sites such as Gamestage. Martijn's copyrights page on WoS (**www.worldofspectrum.org/permits**) gives a very clear summary of his views regarding copyright and he displays all emails he has received regarding permission, listed according to both software houses and individual programmers (that's a lot of emails). Gamestage does also claim to be actively pursuing distribution permission by writing to software companies; in contrast to WoS, Gamestage doesn't show any actual evidence of this, other than listing the companies they claim to have received permission from, but the key difference is deeper than this. The gist of Martijn's stance is that the copyright owner's decision

is unquestionably final; Gamestage, however - although they acknowledge this right - express disdain at denials received nonetheless ("We really hope that someday all enterprises will understand our point of view and let us distribute their products with no 'buts'"). The expectation is sort of that companies *should* permit distribution.

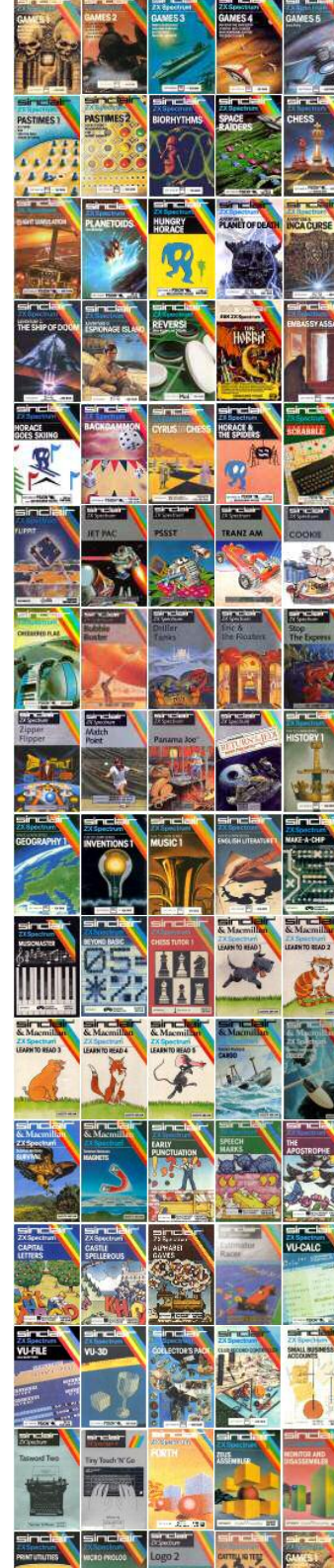
The difference in approach is perhaps best illustrated through the two websites' recent responses to yet another development in distribution issues - the emergence of a brand new retro software label called **Retro-Soft** and their arrangement with the **Shaw Brothers** regarding their back catalogue of games. The deal means that Shaw Brothers titles will be removed from free distribution, and this is how WoS covered the news:

*We have another confirmation that retro gaming is still growing fast: The brand new retro software label Retro-Soft signed an exclusive deal with Shaw Brothers, to bring various of their games back to commercial status. Apart from selling the original Spectrum versions, Retro-Soft announces to remake those games for mobile phones.*

*Although of course these games were removed from the archive, it looks like the Spectrum's future is as bright as ever (especially considering it was picked before other systems)!*

Gamestage, on the other hand, reported the event in much more negative terms (and also confused 'Retro-Soft' with 'Retro-Trader'):

*More sad news! This year seems to be getting worse for Spectrum fans and Gamestage! Retro-trader company has signed an exclusive license contract with The Shaw Brothers, which*



in fact the Sinclair cassette version of *Jet Pac* was incorrectly coded G27/R). By this time the silver label design had been introduced and so this was the style used for these titles too.

So *Jet Pac*, *Pssst*, *Tranz Am* and *Cookie* ended up being released on cassette by Ultimate, on ROM cartridge by Sinclair in the 'old' Sinclair design, and then by Sinclair on cassette again - this time in the silver label design. Extremely confusing. And it gets worse. We're not actually sure that all four titles were released as silver labels. *Jet Pac*, *Pssst* and *Cookie* are all known to exist for certain as silver labels - these titles are in fact considered to be the gems of the Sinclair range on ebay, fetching much higher prices than other silver label Sinclair software - fetching much higher prices than pretty much any other Spectrum software. But what about *Tranz Am*? We can infer its silver label existence from the silver label existence of the other three Ultimate-formerly-ROM-cartridge titles and their cassette spine codes, but no-one appears to have ever actually seen this product. Does it even exist? If it does and a copy ever manages to find its way onto ebay it's been speculated it could well fetch three figures. If it doesn't exist... why doesn't it exist?!

But we're not done yet with the silver label mysteries - an even bigger one lurks just around the corner. At some point during 1984 Sinclair decided to change the spine code format; all of a sudden, four digit codes - each starting with a 4 - appeared in the

place of the old codes. G36/S was the last game to use the old code system (*Zipper Flipper*); instead of G37/S the next game to be released (*Match Point*) came with the code 4036. For the educational programs E24/S (*Alphabet Games*) was the last title to use the old code system; instead of E25/S the next program came with the code 4324. The only other range affected was the Business range: 4607 was the number for *Tasword Two* where the expected code would have been B8/S.

Why the change of codes and why, specifically, were these particular numbers used with which to introduce it? It turns out, in fact, that these codes were actually being used at least a year earlier, alongside the old coding system. The series of 'Sinclair Special' four page advertising supplements, tucked into a monthly magazine (I can't seem to work out which magazine - possibly Sinclair User) reveal this on their order forms, where products are listed using both sets of codes; *Chess Tutor 1*, for example, is listed with the code E9/S to the left of the title and 4308 to the right.

Further analysis of these order forms (WoS currently hosts Sinclair Specials numbers 1, 3, 4, 5 and 6) reveals that these order codes were in fact used for *all* Sinclair products - not just Spectrum software. Spectrum hardware items were given codes starting with 3000, ZX81 hardware items were given codes starting with 1000 (including the ZX Printer) and ZX81 software got codes starting



>Microdrive data recovered

Announcing the find on his website in February, it was at first a bit of a head scratcher as to how the data from these cartridges was to be salvaged. But once Spectrum preservation expert **Andy Barker** got involved it wasn't long before those carts were well and truly mined for their data. In addition to early versions of now well-known loading screens such as **Wizball** and **Arkanoid II**, the cartridges also contained previously un-seen graphics for an unreleased version of **Total Recall** as well as **Athena** mock ups that were never used and some graphics for an Ice-Hockey game that was never released. A major find, then. You can explore all the pictures at: <http://ftp.worldofspectrum.org/pub/sinclair/games-extras/MarkRJones/>

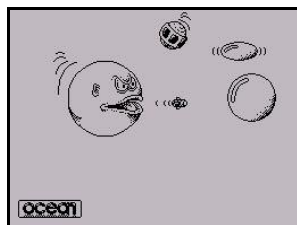
- 1) Connect your Speccy's MIC socket to your PC's line-in socket.
- 2) Boot the Introduction cartridge

However, Spectaculator is on the other end of the audio cable with \*MOVE running in restore mode so it just writes the data to the .mdr file. Magic!

**Right: Evolution of a loading screen**  
- from early ideas to finished work.

>Perfect printing for your +3

Just open up the printer cable,  
and write down which wire is No. 1



NOTE 3: if your centronics cable has a wire going to 36, IGNORE it.



## THE ULTIMATE SINCLAIR DESKTOP?

The Stonechip Echo Amplifier is an extremely rare find these days. It's special because it was one of the very few third party peripherals to adopt casing that mirrored Sinclair's own shape and style. It sits perfectly next to a rubber keyed 48K.

The model shown is on loan to ZXF and was cleaned up using wipes and an electric toothbrush. It came without a power supply or instructions, but a standard 48K PSU works fine.





## .NET ZX

### >New Spectrum emulator in works

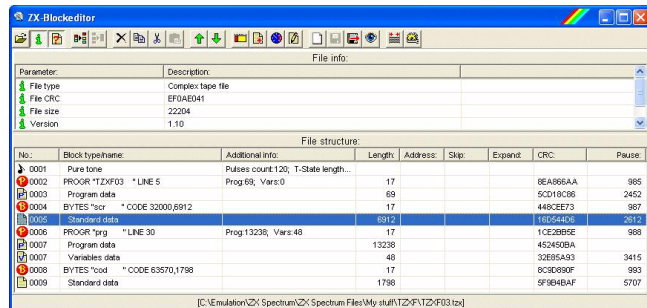
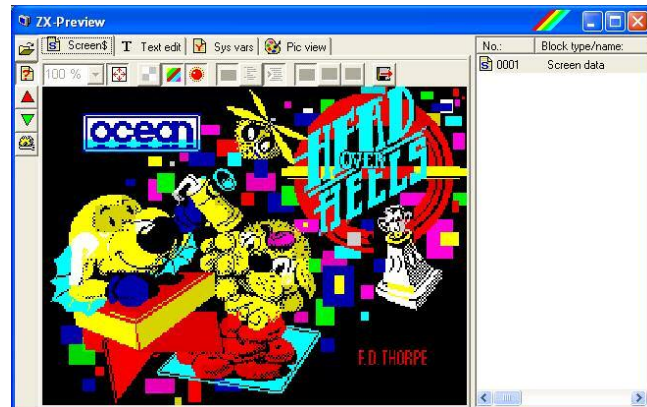
.NET is how Microsoft see the future of programs on the PC. Etc. It's a free upgrade to Windows XP that can be had from [microsoft.com](http://microsoft.com). And **Adrian Robson** is writing a new Spectrum emulator in it.

Currently a Spectrum Emulator Without a Name, Adrian wants his emulator to be orientated more towards the casual Speccy game-player than the hard-core emulator junkie; with this in mind he's putting a lot of thought into making support material such as instructions and inlay art accessible.

In its current state the emulator offers no support for tape files; it doesn't emulate the Spectrum's border and it only covers the basic 48K and 128K models. A way to go, then, but a promising start.



**Spectrum Emulator Without a Name** recognises snapshots and displays screen\$ and basic info in the panel to the right of file names. Clicking on 'instructions' brings up inlay text in a separate window; unfortunately SEWN doesn't recognise WoS text instructions, these have to be re-formatted in RTF before being saved into the instructions folder. If you'd like to help Adrian out (he's very keen for others to get involved) you can email him at [captain\\_grey@hotmail.com](mailto:captain_grey@hotmail.com)



## NEW MODULES

### >ZX-Preview and ZX-Blockeditor

Last issue we brought you news of the first of **Claus Jahn's ZX Modules**, ZX-Paintbrush and ZX-Explorer. Collectively the modules are intended as a replacement for Claus' previous project, **ZX Rainbow Second Edition** and the next two have now been released.

**ZX-Blockeditor** displays a breakdown of the contents of a TZX or TAP file and allows you to move these about to your heart's desire. It's a nice little tool which I tried to use in the creation of **TZXF**, but I kept getting loading errors from the resulting tape files created and ended up going back to good old **Taper**.

**ZX-Preview** works either on its own or with **ZX-Blockeditor** and displays screen\$ data and other goodies from your selected Spectrum file.

The next module under development is the rather nice looking **ZX-Editor**. You can check up on its progress, as well as grabbing the above at: <http://home.arcor.de/claushahn/spectrum/>

run using the engine). The major ones are TADS, Hugo, Inform, and AGT. There are quite a few more, some still active, but most not updated in years on the [ftp://ftp.ifarchive.org/if-archive/programming/](http://ftp.ifarchive.org/if-archive/programming/) directory.

### What are your future plans for WinPAW and how do you see these fitting in with the directions IF is taking as a genre?

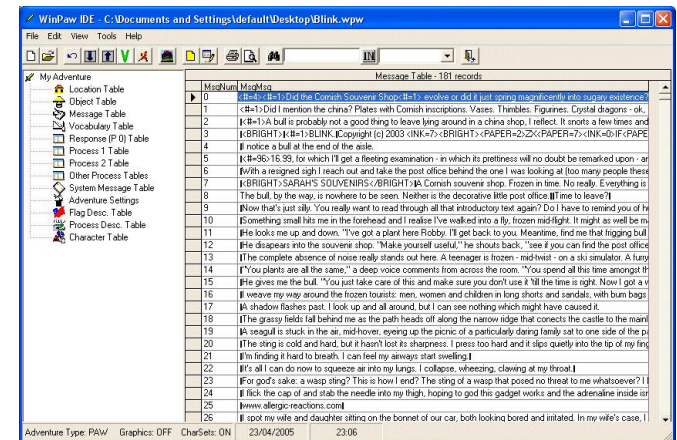
Currently the next version will add Export capabilities in ACE format and being able to import database changes from a text file. Sometimes when you have a multitude of changes it is easier to type them into a text file than to go through all the screens in Windows.

I really don't know how these fit in with the directions IF is taking as a genre. My main idea is to make WinPaw as easy to use and versatile as possible.

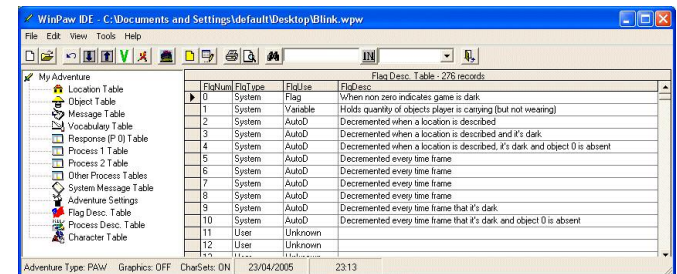
One aside, this is not the first time I wrote a version of PAW. Back when PAW & Quill were originally out, I wrote a version, strictly to see if I could do it, which actually looked like PAW & Quill in ALGOL, the main programming language on the Burroughs mainframe (Burroughs is now Univac).

Actually, I have never been too good a solver of text adventures. I have actually completed 4, one the original Colossal Cave adventure by plodding thru it for months and months. The others I had to get some hints from the internet. I did write a TADS version of the Very Big Cave Adventure once. And, as already mentioned, I have been working for years on an adventure based upon Philip Jose Farmer's 'World of the Tiers' series. I have now started it in AGT, TADS, & WinPaw. My main thrust after I am done with 6.0 is completing the WinPaw version of the 350 point Colossal Cave Adventure. It is maybe 25% completed, but I know I can do the stuff to complete it.

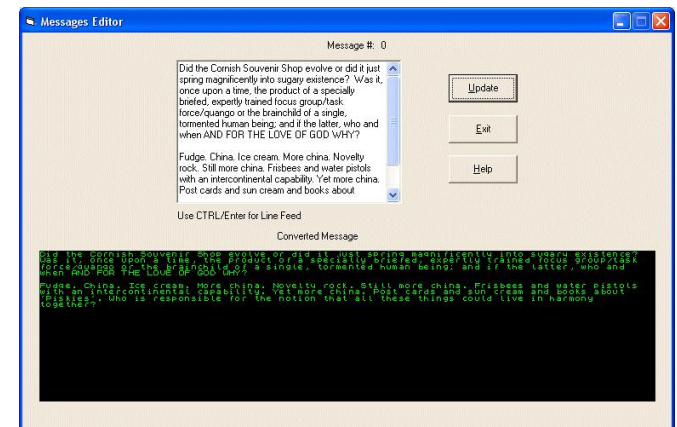
[www.winpaw.com](http://www.winpaw.com)



### WinPAW lists BLINK's messages.



**Very useful: the incorporation of flag metadata saves all that trying to work out which flag controls whether the ogre has eaten a mint or not.**



**Simple editing. And you can keep the Spectrum font too.**





*What are you going on about?* 

Send your letters, viewpoints, mini articles, etc to [zxf@cwoodcock.co.uk](mailto:zxf@cwoodcock.co.uk), with 'wibble' in the subject line.

#### FEEDBACK FOR ISSUE 9

##### Comments left at the ZXF website.

TEN [rating] is not enough! Keep it up. Thank you very much and enjoy Christmas! [Czech Republic]

Thanks for this incredible magazine!! [Spain]

This is the first issue I've read and I love it - great work! [Australia]

Thanks for a this great big magazine. It is full of interesting stuff to read [South Africa]

Great work. As a teenager, I didn't pay as much attention to so many topics that you are covering, especially hardware issues. You're giving us a great recap on what's been going on in our non-Spectrum years. [Amman, Jordan]

Another great issue of ZXF with far more pages than ever before. Keep it up that way! [Slovenia]

Keep up the good work! Congratulations! [Rio de Janeiro]

Boy! am I glad I kept my old Spectrums! Great, great, great mag! [Flanders, Belgium]

ZXF is useful and superb. The only thing I would like to see is a bigger font. Thanks. Keep doing the good job! [Argentina]

Thank you for this magazine! [Belarus]

#### LETTERS TO ZXF

Thanks for the playtx reference and credit in ZXF09 (a wonderful read again - well done), I just wanted to point out that you missed the credit for Tomaz Kac, who wrote the original version of playtx for DOS back in 1997, and the vast bulk of code is still his. It would be great if you could mention it in the next issue.

Thanks again,

Fred

Congratulations with new issue of ZXF! Great layout and great amount of useful information as always.

By the way, I used your magazine as reference to collect information about new hardware such as ZXCf, zxUSB and so. The amount of information I found was much than enough to write an article, it will be published in one of russian Spectrum magazines soon.

Thank you once again for your excellent work.

Kendo Anoubis

Greetings for your latest ZX-F issue. It's quite a lot to read and watch what's happening on Spectrum scene. Hopefully, I have already launched a new PDF-zine called 'ZX Spectrum Files', in Spanish language as I'm from this quite sunny place (well, not always). Well I want to try to do more or less the same here, for those who speak Cervantes accent (this is Don Quixote's year). The site from which you can download ZXSf issues, for free, is:

[www.microhobby.com/zxsf/pagina\\_1.htm](http://www.microhobby.com/zxsf/pagina_1.htm)

Use better Internet Explorer or Netscape navigator, as it's still in trouble with Mozilla. Nevertheless, a new update is up to come

nearly, fixing this problem.

Keep on going as remarkable as usual with your zine. Simply the best in its genre.

Kind regards,

Ignacio Prini Garcia

I'm writing this letter to say big THANK YOU for another brilliant issue of ZXF. I like ZXF very much because Speccy was my first computer (today I don't own "the real thing", I only emulate it). ZXF is also first "Sinclair only" magazine that is available without problems for me. I live in Poland, Spectrums were very popular in my country. There were many Polish computer mags but they were multiplatform (Atari/Amstrad/Commodore/Spectrum). Titles like Crash, Sinclair User and Your Sinclair weren't available in Poland so I couldn't just buy ZX mag every month :( (You were lucky there in England :)

I have one complain about ZXF09 - where is article about year 1986? Will the saga be continued?

And the last thing - emulators. As we all know the PCs are the most popular computers and there are many Spectrum emulators for PC. But there are other computers too and emulators for them. So, maybe an article about Spectrum emulators for Amiga?

Greetings

Piotr Szymanski aka PopoCop

**Regarding Retrospective, Matthew Harrodine has not been in touch with ZXF since issue 8 and is not returning emails. Also his website appears to be permanently down. It's a source of considerable concern for me and if anyone is able to put me in touch with Matthew or is able to let me know how he is I would appreciate that greatly.**



TAKE WINE, SAY BARGIRL "TELEPORT IN ATTIC", N, CLIMB OVER BAR, W, S, NE, N, N (reception office - see the thermos flask here), POUR WINE INTO FLASK, S, S, U, SW,

DROP ALL, TAKE BRASS KEY, WAIT (about 5 to 10 turns), N, D (night porter will probably catch you but that awful day porter should have gone), SW, GO TO BED ???

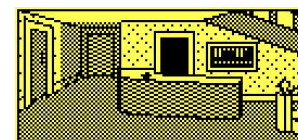
N, DROP BRASS KEY, D, X CLOCK (should be just after 1 o'clock - night porter is asleep), N, E, CLIMB OVER BAR, S (bargirl should be here) SAY BARGIRL "???"

N (bargirl follows you???),

CLIMB OVER BAR, W, W, W, N, W (into manager's office), TURN COMPUTER ON (manager slumps in his chair), SEARCH MANAGER (find a badge), WEAR BADGE. Do not turn off the computer. E, S, E, D (basement), TAKE CRATE, U, E, S, U, U, DROP CRATE, D, D, N, W, W, S, W (staff bedroom), TAKE GRENADE, E, N, E, E, S, U, TAKE BRASS KEY, SW, X DRESSING TABLE, TAKE CHAIR, N, U, PUT CHAIR ON CRATE, D, SW, TAKE LASER, TAKE BOX, TAKE PARAFFIN, TAKE TORCH, N, DROP BRASS KEY.

U, CLIMB ON CHAIR, OPEN TRAPDOOR, U (dark), TURN TORCH ON, X CONSOLE, PUT BLACK BOX INTO HOLE, STAND ON PLATFORM (teleported to alien ship), FIRE LASER, W, N, N (must be wearing badge), DIVE, FIRE LASER, THROW GRENADE, THROW PARAFFIN (you crawl south),

need Bargirl present to save you ???



## About Adventure Probe

ADVENTURE PROBE is a paper-based fanzine for players of text adventures.

Probe, as it is affectionately known, is a monthly A5 magazine with 48 to 60 pages per issue. There are sections for letters, reviews, articles, advertisements, newsdesk, plus reference pages containing solutions, objects and their uses, getting you started, red herrings, bugs and amusing responses, hints and tips, and more. Contributions are sent in by the small but very loyal readership.

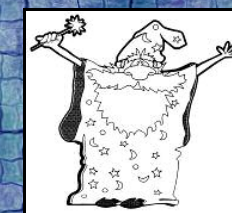
It was founded in June 1986 by Sandra Sharkey and Pat Winstanley. After a few years Mandy Rodrigues became editor, and in June 1992 I took over as its third editor. There is a magazine for EVERY month to date.

There have been many changes in the computer world during the last twenty years. Most adventurers started on a C64, Spectrum or Amstrad, and maybe upgraded to an Atari or Amiga. (As a matter of interest I started on a BBC B.) As it became impossible to get these computers repaired, it was a natural progression to play text adventures on a PC under various emulations, as well as the PC-specific adventures.

As the number of subscribers is falling, eventually the time will come when Probe will no longer be printed. However, one thing won't change, and that is our love of text adventures.

Barbara Gibb  
Adventure Probe  
52 Burford Road  
Liverpool L16 6AQ  
U.K.

[gibb2@blueyonder.co.uk](mailto:gibb2@blueyonder.co.uk)





find faults and reassemble complete sets - in practice, only after Sinclair sold out and firms like PST bought up the 'stock' from Amstrad.

This explains why so many 'new' Spectrums released to retail came in reverse serial number order - last in, first out. :-) The collapse of distributors Prism was the fatal blow to Sinclair as it released Spectrum systems to retail at below Sinclair's cost price. Even though production was soon halted there was no point in 'fixing' the 'stock' till the gut of machines Sinclair had supplied for distribution cleared, and Sinclair never really got over that.

Your article about Spectrum disc systems was interesting though not particularly informative; it's a pity you did not mention the Sixword Swift Disk system which was the nicest ZX disc expansion, in various ways, I used in my time as Crash Technical editor. I attach the text of my review, which you're welcome to edit and re-use if you see fit. I've got the hardware in my shed and could dig it out for a photo if you wanted and did not want or could not find the Crash review pics. It didn't work last time I tried it, but I'm not sure what part was playing up. I'd be interested to hear from others who own one.

This article has been read from the Video Genie disk on which I wrote

it with a Sinclair SuperBASIC program (Multidos\_bas, in the Quanta library) - I still use the QL to read such disks as 'modern' controllers can't read the FM (single density) format used by the original TRS-80 and Genie WD-1771 disk controller - and transferred to a 3.5" 1.44Mb Qdos floppy to be copied to the hard drive of the Amiga 4000 on which I'm writing this note. Amigas can read Qdos 180-1.44Mb, all Disciple, Plus D, Opus Discovery and +3 floppies as if they were native AmigaOS - or MSDOS - format, with free handlers from Aminet - so they pop up on the desktop as icons, and can be loaded from like any native disk (preserving ZX file attributes like start line and filetype) by any application as soon as they're in a mechanically-suitable drive on any Amiga with the relevant (small, free) filesystem handler installed. XFS handles the most formats with one file, but there are dedicated MGT and QL handlers freely available on Aminet as well. These work with 'Catweasel' Zorro and PCI retro floppy controllers as well as Commodore's standard 'Paula' one.

Incidentally, I fear your 'prediction' of people being able to read MGT and Opus discs with a USB floppy drive in your look forward to 2014 may be stymied by the same ignorance that leads people to believe that Windows is the only

OS ever used by anyone who matters. My understanding is that - for firmware reasons, embedded the other side of the USB - these drives are not capable of reading the 256 byte sectors standard on Opus discs and many earlier micros, and can only read disks with the physical layout of MSDOS - 9 or 18 sectors per track, of 512 bytes each. This is OK for Qdos, ST and later MacOS disks, but could be confounded by the use of a tenth sector on MGT format disks, also an option on Atari, Linux etc etc - and used by Microsoft for some distribution sets.

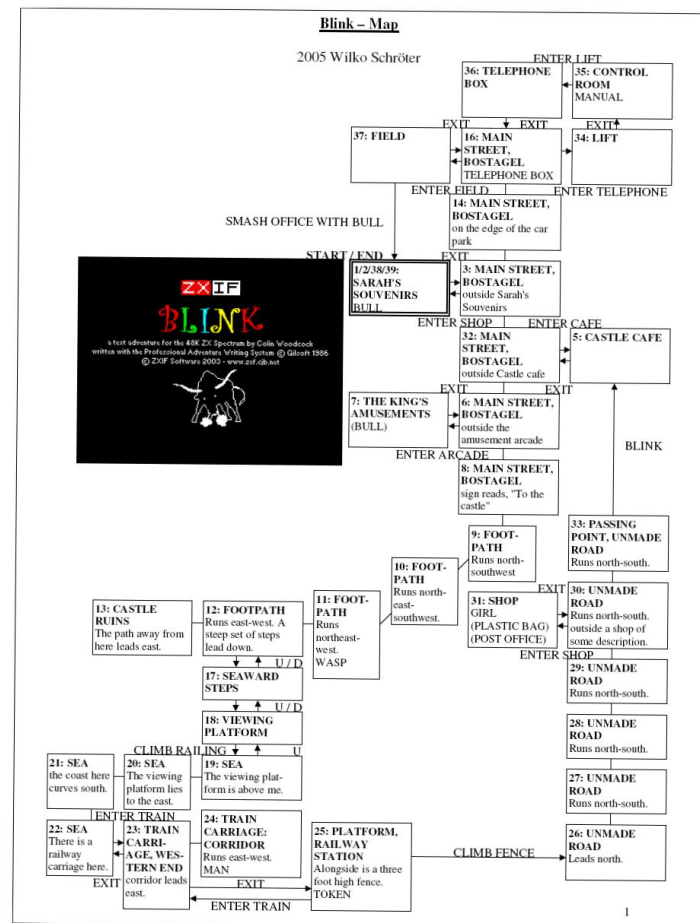
Once again thanks for ZXF, I look forward to the next whenever you feel like doing it, and hope I can help you fill it with interesting stuff.

Cheers,

Simon N Goodwin

**Many thanks for this extremely informative letter Simon - and I take pleasure in reprinting your article on the following pages.**

**Regarding Linux - well, yes, ZXF is definitely the poorer for the absence of any information on Linux emulators. The specific reasons for not having this on my system so far are to do with using NTFS as my filing system. A few poeple - Simon included - have given me a few new ideas to pursue on this, however, so by the next ZXF things might be different...**



## NEW TO THE SPECTRUM SCENE?

The essential sites you need to visit.

[www.worldofspectrum.org](http://www.worldofspectrum.org)

The cornerstone of the community: emulation, discussion, downloads and online gaming.

[www.spectaculator.com](http://www.spectaculator.com); [www.ramsoft.bbk.org](http://www.ramsoft.bbk.org); [www.worldofspectrum.org/emulators.html](http://www.worldofspectrum.org/emulators.html)

You'll be needing an emulator to play those games on...

[www.the-tipshop.co.uk](http://www.the-tipshop.co.uk)

More tips, hints and pokes for those games than you can shake a pointy stick at.

[www.ysrny.co.uk](http://www.ysrny.co.uk); [www.crashonline.org.uk](http://www.crashonline.org.uk); [www.sincuser.f9.co.uk](http://www.sincuser.f9.co.uk)

The online editions of all your favourite Spectrum magazines: YS, CRASH & Sinclair User.

[http://raww.org/](http://http://raww.org/)

Spectrum news from around the world. Constantly updated!

[www.sinclairfaq.com](http://www.sinclairfaq.com)

All your further Spectrum questions answered.

### Walkthrough - by Wibble and Blim for CASA

*Note that this is a brief solution to this very well-written game. There are many objects which can be examined and some of the descriptions are a real joy.*

Inventory, x epipen, x doll, x bull, x post office, get post office, look, leave (you're asked to find the post office).

North, enter car park, x daughter, x wife, x car, leave, north, enter telephone box ("the door won't open" - though, if you wait around, someone will appear and actually enter it - you cannot for the moment), enter field, leave.

South x 3, enter cafe, x menu ("unhealthy"), leave, south, enter arcade (Robby hands you the bull and disappears), x bull ("China. Made in China."), leave.

South x 2, southwest x 2, x wasp, touch wasp, use epipen, west x 2, x ruins, east, down x 2, x couple, climb over railing, west x 2, south, enter carriage, x rag, east, east ("A man blocks the corridor."), enter cabin (you can't), blink (the scenery changes), west, leave carriage.

You meet Bart again (note the reference to manual 214 and the procedure described on page 392), x token, eat token, x token, climb fence, north x 4, x girl (hmm, something very strange is happening), give doll to girl (and receive the bag in return), x bag, get post office out of bag.

Leave (the girl now follows you), north, blink at girl, sit down, blink (you reappear, alongside the little girl, in the village cafe), stand up, leave, north x 3, enter telephone box, leave (and you find yourself in the control room).

X man, get manual 214, read page 392 (note the reference to buttons 2 and 98), say to girl "press button", point at button 98, press button 2.

All becomes clear and you are given another task. Enter lift, leave, enter field, smash bull with post office (and reach the lengthy ending screens).

Displayed on the Classic Adventures Solution Archive: <http://solutionarchive.com/>



type. The FULL listing also tells you the code address, start or record size of each file.

MOVE and BACKUP transfer files, or entire disk contents including empty spaces, between disks. This is a slow process, involving much disk-swapping, if you've only got one drive: data is copied in 4K chunks to avoid disturbing the computer's main memory. It's often quicker to copy files by loading and saving them individually.

DISK BASIC

Version one was ace for gamers, but of limited use to programmers and 'serious' users. Version 2 added commands available from BASIC, as well as the DOS commands called up by the magic button.

The disk BASIC syntax is rather erratically recorded in both the manuals I received, but it's easy enough to work out with a little experimentation. Most disk commands are distinguished by a per cent sign before the disk or channel number. This is simpler than the microdrive's '""m";1;"' though OPEN and CLOSE look odd with extra per cent and hash signs after the 'automatic' hash that comes with the keyword.

You can LOAD, SAVE and MERGE programs, screens, code and arrays, just as with cassette but much faster. LOAD reads about 7K every second. If you LOAD a memory file created by SWIFT DOS

SWIFT DOS COMMANDS

ALTER <address> <value>	Apply POKes (as for Multiface)
BACKUP <drive> <drive>	Copies all files between 2 disks
CATALOGUE <drive> /B/F	List disk file details
DATE <Day> <Month> <Year>	Sets the default date
ERASE <name>	Erases a file from the disk
FORMAT <name> <files>	Formats disk for <files> files
KEEP <filename>	Protects a file from ERASE
LOAD <filename> /Addr/S	Loads a memory image file
MOVE <name> <name>	Copies a disk file
SAVE <name> /S/CODE/DATA	Save image, screen or data file
UNKEEP <name>	Removes 'KEEP' protection
*	Resets the computer
QUIT	Returns from DOS to main program

All commands can be abbreviated to their first letter.  
<name> = (optional drive No. :) 1-10 character filename.

it runs automatically.

Unlike Amstrad's Plus Three, the Swift Disk can OPEN files. You can use up to four files on one disk at any time; these can be normal text files, processed with PRINT, INPUT and INKEY\$, or random-access files with fixed length records, passed back and forth with IN and OUT keywords. The BASIC interpreter can only process files at about 0.5K per second.

A file can be opened at the start or the end, but you can't 'rewind' or move about in a text file, and there's no way to discard data from the end without creating a new file. The %EOF function lets you detect the end of a file, but you can't trap other errors without

a toolkit.

You may run into problems if you CLEAR low addresses when using Swift BASIC. There's no check on the amount of free memory when you type in a program line, so you may get 'stuck' editing a line if the system can't find enough room to convert it into tokens.

Swift include a FORMAT command for their printer port, which lets you LPRINT and LLIST at any speed to any width of serial printer.

MICRODRIVE EMULATION

Programmers and serious users will be especially impressed by the microdrive emulator - a new



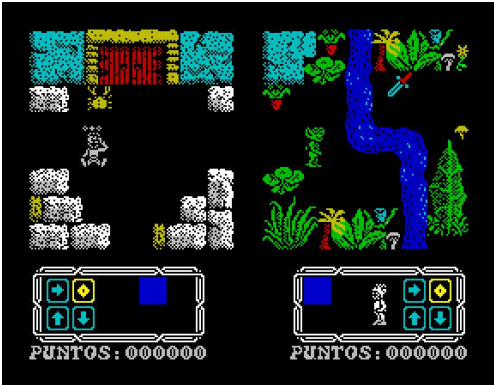
VEGA SOLARIS

Author: **Fernando Saenz Perez, Carlos Garcia Cordero** Price: **Free** Reviewer: **Colin Woodcock**  
Website: **www.speccy.org/trastero/2005/070305/070305.htm**

Benefit of the doubt time here. Apparently **Vega Solaris** is a previously unreleased Spanish title from Dinamic which was scheduled for release originally in 1989. It once was lost but now it's found. Although in fact there's been a Vega Solaris up on WoS for some time now, one which looks almost identical to this new find but which was released in 1987. Admittedly the WoS version is just a snapshot file and the new 'find' is a proper TZX, complete with a rather snazzy

loading screen that features nothing less than a miniature Space Invaders game you can play whilst the game's loading (although I can't for the life of me work out how to fire). The WoS title quite clearly states in the main menu that its release date is 1987; the new version quite clearly states 1989. So it's a little bit of a mystery, and the blurb on the page from which you can download the game (see above) doesn't really give all that much information

about the game (particularly once it's been run through the Google translator) other than that someone is jolly chuffed with themselves that they've found it. It's undisputable, however, that this is graphically a very nice game to look at (do I sense a hint of Sabre Wulf in some screens?). It's worth checking out for this alone. The plot's still a bit of mystery at present, but I'm sure this too will come to be found eventually.





microdrive, although CAT and ERASE are noticeably faster. Swift are still fine-tuning their code, and hope to double the speed of many file operations by 'interleaving' data inside the pseudo-cartridge.

## HARDWARE

The Swift Disk interface uses the same black plastic box as Sinclair's Interface 1, with the words 'Sinclair' and 'ZX Interface 1' filed off and covered with plastic stickers. The interface fits the original Sinclair Spectrum models well, but it's a very tight fit on the Amstrad Plus Two.

A Kempston joystick socket skulks at the back of the box, where the Interface 1 serial plug used to fit. Some of the original holes in the case have been cut out to make room for different connectors. The disk drive socket sticks out where Interface 1's network sockets used to live.

The disk connector is the same as is used by the BBC Micro and QL, among other machines, so there's no shortage of alternative drives. You can plug in up to four 'modern' 3.5 inch or 5.25 inch drives; the software automatically adjusts to different drive formats.

Some old drives can't switch tracks fast enough - Swift only allow drives six thousandths of a second to step from one track to the next. The Disciple interface copes with slower drives, but you must load a 'configuration' file whenever you start to use it. The Disciple also limits you to two drives.

Alongside the Swift disk connector is an edge connector for other Spectrum peripherals. You can plug in anything that does not use a 'magic button' to interrupt the computer. Swift hope to remove even this restriction.

After all this standardisation the printer port almost comes as a relief to Spectrum fans, used to the way Sinclair defied convention. The port uses the ultimate obscure socket - a modified Microdrive edge-connector!

Sixword didn't send an adapter (#14.95), despite requests, so I can't say how well it works. They say it's much like the port on the Interface 1 - in other words, O.K. for driving an RS-232 printer, but a bitch for anything else. ZX and Alphacom printers still work.

You can plug a genuine Sinclair Interface 1 into the back of the Swift unit, and run microdrives and disks at the same time. You can't use real microdrives while you're using the microdrive emulator, for obvious reasons, but Swift supply a program to move the contents of a tape into a 'pseudo-microdrive' automatically.

## TECHTALK

The SWIFT contains 8K RAM and 16K ROM. The ROM is split into 4K sections, with space for up to 32K. The entire system, including the disk and printer ports, is invisibly hidden under the Spectrum's 16K ROM unless the DOS is in use. This makes it hard for protected software to detect and disable the interface; I have yet to find a program that won't SAVE to disk properly.

The circuit-board is crammed into the Interface 1 box with no room to spare. It is well-engineered but crying out for some more space. Swift intend to use their own box eventually, saving space and money by re-designing the logic circuit to use custom PLA chips.

## COMPETITION

The Swift disk is very competitively priced, mainly because it is only available direct from the manufacturers. The interface costs £75 on its own, or £149 with a separate 640K 3.5 inch drive and power-supply. That's a bargain price for the drive - you'd be hard put to find a similar unit anywhere for under £100.

The Swift unit competes with the Disciple interface, which Franco Frey reviewed here in March. The Disciple costs £90 without a drive. Both load at similar speeds, but the

Swift SAVE is about twice as fast as Disciple's.

The Disciple has the edge in terms of hardware - it packs 780K, rather than 640K onto a disk, although some of that space is needed for its configuration file. It has Sinclair standard joystick and network ports, and a flexible driver for parallel printers. The Swift is easier to use, and significantly more compatible with existing programs.

Amstrad evidently think a Spectrum with a disk drive is worth £250, or at least £200 - our predicted price for the Plus Three this Christmas. If you've already got a Spectrum, and want disks, an add-on interface is cheaper and - at least for the time being - more flexible than Amstrad's Plus Three.

The Plus Three has less than a third of the speed and capacity of the Swift or Disciple. The Amstrad won't work with microdrive software, and lacks BASIC file-handling commands. Most damning of all, there's no easy way to transfer protected game tapes onto Plus Three disks. Spectrum-specific software may be published in that format, but I'd be amazed to see 'hit' programs released on three inch disk alone, with no tape version for other users.

The Plus Three benefits from serial and parallel output ports, and comes all in one box. In theory it is compatible with the old CP/M business operating system, but 80-column display hardware will be needed before most programs will work. Frankly, I don't think Spectrum users need or want CP/M.

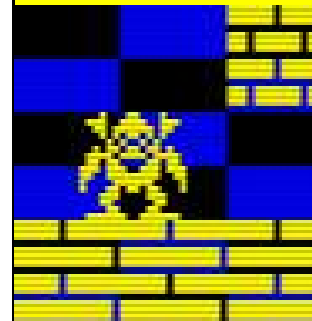
## VERDICT

The Swift disk is well-engineered and competitively priced. It's fast, friendly and uniquely compatible with existing Spectrum software.

The question is, can Spectrum users afford a £150 upgrade? It's worth it, but only if the restrictions of cassette are hampering your use of the computer. You DO get value for money - a disk drive totally transforms your system.

## JAMES ZEUN

Higgledy Piggledy is a challenging game and certainly worth getting. When I first began playing, I was a little confused as to how I directed my pigs to the teleporter. It seemed at the time to be an impossible task, yet I still managed to do it. I was disappointed with the lack of music on the title screen - a game like this deserves a theme tune. In-game sound effects are pretty basic, even for the Spectrum. However these are only minor things, and when compared to the games polished design can be dismissed. I personally hope this isn't the last we see of Eadwig Addlethorpe. There are certainly many directions the creator could take this character, without restricting it to this one game design. Like Dizzy, I believe Eadwig could be the Spectrum's leading character for 2005. Which I don't believe would be a bad thing. It's overdue that Spectrum users had a computer icon to be proud of. Dizzy did this well for some time, but with no new official Dizzy games being released for the Spectrum. I believe Eadwig could do a good job in fulfilling this role.



# ZX COLUMNS

Author: **Santiago Romero** Published by **Compiler Software** Price: **Free**  
Reviewer: **C Woodcock** Website: [www.speccy.org/compiler/index\\_en.php](http://www.speccy.org/compiler/index_en.php)

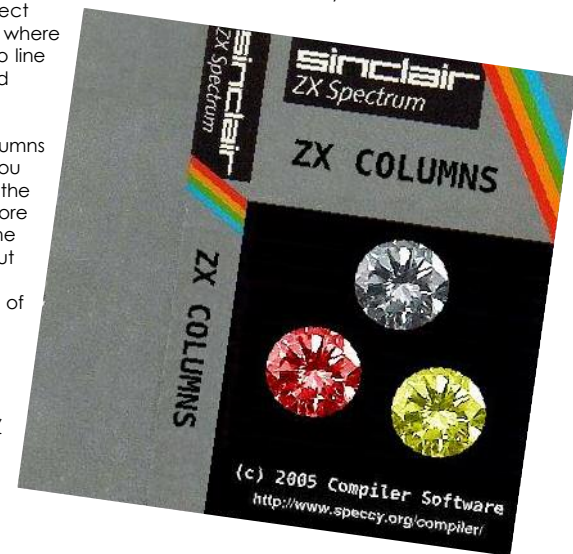
**ZX Columns** is actually one of three new games available for download from the Compiler Software website. And they're all free. There's **Another Brick On The Wall 2**, a remake by **Miguel A. García Prada** of the game presented to 2004 BASIC Contest at Bytemaniacs (winner of its category) - a sideways variant on Arkanoid/Batty, etc, and reasonably fun, but very BASIC in its look and feel (presumably it's been compiled). And there's **ZX Poker** by **Santiago Romero** which pretty much does exactly what you might imagine it does, although I don't know how to play poker so we'll just have to trust it (we'll have to arrange for Sir Clive to give it a go).

But **ZX Columns** is my favourite of the bunch by far, also programmed by Santiago Romero and with graphics by **Davit Masía**. It's basically a Tetris/Connect Four hybrid where the aim is to line up coloured gems that descend in vertical columns of three. You can rotate the colours before you drop the columns, but only when three gems of the same colour are lined up (either horizontally, vertically or diagonally) will they disappear. Apparently



this was a classic for the SEGA Master System that's since been remade for a number of more recent platforms. And now its the Spectrum's turn.

I must admit I enjoyed **ZX Columns** quite a lot more than I expected to; I was horrified to discover just how much time had elapsed playing it on only my first go [which means it's probably too easy - Ed]. It's a straightforward game but it's also a very addictive one.





## SPECTRUM +3 SOFTWARE AND SPARES



### HARDWARE:

**3 inch 180K disc drive for +3.** Reconditioned with 3 months warranty £10 each. These drives can be supplied with cream coloured facias in place of the black facias if wanted -- just ask.

**Belts for the 3 inch drive** £1 each. New. Loads available. (Just send a S.A.E. with order to cover postage -- correct for up to 20 belts).

**Monitor lead** to convert +3, +2 and +2A to use an Amstrad CTM644 colour monitor. £4 each.

### 3 INCH DISCS:

**3 inch Blank discs:** Second-hand good quality Amsoft or Maxell only supplied. All have been reformatted, verified and relabelled. 80 pence each or £7-50 for ten. Larger quantities available 100 for £65, 1000 for £450.

Sometimes available new 3 inch discs at £1 each, please ask.

**JOHN R P KING**

**26, GUYSFIELD DRIVE, SOUTH HORNCHURCH, RAINHAM, ESSEX.  
RM13 7AJ**

**TEL: 01708 630477 john@pcwking.freemove.co.uk**

**www.pcwking.freemove.co.uk**

## USE YOUR VOTE WISELY ON 5 MAY

Dear Valued Constituent,

You might find it surprising that a 1980s home computer is standing for election as a member of parliament in your area. After all, computers have tried and failed for many years to pass tests of 'human intelligence'. But what exactly does that phrase mean?

Apparently it's supposed to have something to do with the way in which decisions and policies are made. 'Intelligent' decisions are:

- based on evidence
- made for the benefit of all ('all' meaning all, not 'us' or 'me')

As opposed to:

- based on how we think reality *should* be, dammit
- based on how we're feeling at the time (generally bored, irritated, angry or scared shitless)

The mistake that voters are making, year after year, is to assume that *politicians* are capable of human intelligence. In fact, most politicians would not even pass the Turing test. *Computers*, however, are just as capable of bad decision making as politicians are - and they don't have salaries and expense accounts. In the case of the ZX Spectrum you don't even need an IT support department.

On 5 May, make sure your vote counts and elect the candidate whose mistakes will at least produce a recognisable error message. Using the award winning 'Member of Parliament' software by Sinclair your Spectrum will make decisions on your behalf based on:

- FOR ... NEXT looping
- available memory
- the activities of the kettle/vacuum cleaner next door

Additional software modules will include *Daley Thompson's Olympic Bid*, *MacMan's Magic Treasurer*, *Cookie* (Jamie Oliver 37p budget re-release) and the ever popular *Horace and the Weapons of Mass Destruction*.

Say farewell to dashed hopes and make colour clash a feature of *Daily Mail* editorials. **Vote Spectrum on 05/05/05.**

P.S. Please don't vote Commodore. That would be just silly.



# Vote Spectrum

